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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

UNITED STATES OF AMERICA,
Plaintiff,
v.
FUJIAN JINHUA INTEGRATED CIRCUIT
CO., LTD,
Defendant.

) CASE NO. 18-CR-00465 MMC
)
)
UNITED STATES' OPPOSITION TO
DEFENDANT'S MOTION IN LIMINE NO. 1
TO PARTIALLY EXCLUDE THE TESTIMONY
OF DR. THOMAS W. DYER
)
The Honorable Maxine M. Chesney
Pretrial Conf: January 18, 2022, at 10:00 am
Courtroom 7, 19th Floor
)

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INTRODUCTION

The United States intends to offer the expert testimony of Dr. Thomas Dyer at trial to explain the Indicted Trade Secrets (i.e., Trade Secrets 1-8 in the Indictment) and defendants' use of them. Jinhua's motion to exclude portions of Dr. Dyer's opinions ignores the structure and content of his expert disclosure and misapprehends the charged statutes. Jinhua's motion appears primarily directed at precluding Dr. Dyer from testifying to the purported "ultimate issue" of whether Indicted Trade Secrets meet the definition of "trade secret" under 18 U.S.C. § 1839(3).¹ The United States deems such "ultimate issue" testimony of little consequence. It will therefore stipulate that experts should not opine on the "ultimate issue" whether information is a "trade secret" under the statute. Dr. Dyer will testify as to the definitional elements of "trade secret," as described in his disclosure.

11 Jinhua’s motion to preclude testimony about “misappropriation” and whether defendants “stole”
12 Micron’s trade secrets misapprehends the law and Dr. Dyer’s disclosure. “Misappropriation” is not an
13 element of the charged offense, let alone an ultimate issue (unlike a civil case). And the United States
14 did not notice, and does not intend to elicit, testimony from Dr. Dyer about whether defendants “stole”
15 Micron’s trade secrets.

RELEVANT BACKGROUND

17 On July 2, 2021, the United States disclosed the expert testimony of its DRAM-process expert,
18 Dr. Thomas Dyer. Dr. Dyer has spent countless hours reviewing the documents and Indicted Trade
19 Secrets in this case and determining whether—and the extent to which—the joint DRAM development
20 between defendants United Microelectronics Corporation (“UMC”) and Jinhua known as Project M used
21 Indicted Trade Secrets 1-8 to develop DRAM. Dr. Dyer found that Project M’s use of Indicted Trade
22 Secrets 1-8 went far beyond a single rogue employee referencing and incorporating information from
23 one of the Indicted Trade Secrets. Dr. Dyer found that, at the project’s inception, Project M employees
24 copied Micron Technology, Inc.’s (“Micron”) entire 25 nanometer process flow and used it as the

²⁶ 1 Whether the Indicted Trade Secrets meet the legal definition of “trade secret” under 18 U.S.C.
²⁷ § 1839(3) is not the “ultimate issue” in this case. And for the conspiracy counts, it is no issue at all. See
²⁸ *United States v. Liew*, 856 F.3d 585, 600 (9th Cir. 2017) (government need not prove existence of actual
trade secrets for conspiracy counts, only that defendant believed certain information was a trade secret).

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1 benchmark—or starting point—for Project M. Dr. Dyer traced the ensuing engineering effort to alter
 2 Micron’s process flow so Project M could (1) implement the Micron process in a new fabrication facility
 3 (*i.e.*, Jinhua), (2) maximize use of existing tools in UMC’s logic-fabrication facility, and (3) develop
 4 DRAM that it could more easily evolve into future technology generations. Dr. Dyer’s analysis shows
 5 that from its inception to its formal “transfer” to Jinhua, Project M’s process flow was based on
 6 Micron’s. Even where Project M altered the Micron 25 nanometer process, Dr. Dyer determined that
 7 many of those changes came from the Indicted Trade Secrets associated with later generations of
 8 Micron’s process technology (e.g., Micron’s “1x nm” process flow).

9 As detailed in its Rule 16 disclosure, the United States intends to elicit expert testimony from Dr.
 10 Dyer regarding (1) a general overview of DRAM and DRAM-process technology; (2) descriptions of the
 11 Indicted Trade Secrets 1-8; (3) why the Indicted Trade Secrets meet the definitional elements of a “trade
 12 secret” under 18 U.S.C. § 1839(3); and (4) the extent to which Project M used information in Indicted
 13 Trade Secrets 1-8 to develop DRAM.

14 ARGUMENT

15 I. The United States Will Stipulate That Experts Should Not Offer Opinions Whether 16 Information is a “Trade Secret” Under 18 U.S.C. § 1839(3)

17 The United States’ disclosure for Dr. Dyer breaks out his trade-secret opinions by the
 18 definitional elements of “trade secret” under § 1839(3). The title of section II states that the information
 19 in indicted Trade Secrets 1-8 “Meet *Elements* of the Definition of ‘Trade Secret.’” Dyer Disclosure at 6.
 20 After providing summary description of Indicted Trade Secrets 1-8, the disclosure provides detailed
 21 summaries of Dr. Dyer’s opinions with respect to the following elements of the definition: (1) the
 22 information in each of Indicted Trade Secrets 1-8 is not generally available in the public domain, Dyer
 23 Disclosure § II.B; (2) the information in each of Indicted Trade Secrets 1-8 is not readily ascertainable
 24 through proper means by a person or company skilled in the field of semiconductors, Dyer Disclosure §
 25 II.C; and (3) the information in Indicted Trade Secrets 1-8 derives independent economic value from its
 26 secrecy, Dyer Disclosure § II.D. *See* 18 U.S.C. § 1839(3) (including those elements, in addition to the
 27 requirement of reasonable measures to protect secrecy). After seven pages of summary related to those
 28 elements, the disclosure includes a single paragraph stating that, after listening to the testimony about

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1 Micron's protective measures, Dr. Dyer may testify that each of Indicted Trade Secrets 1-8 is a trade
 2 secret under 18 U.S.C. § 1839(3). Dyer Disclosure § II.E.

3 Jinhua's motion all but ignores the structure and substance of Dr. Dyer's disclosure. Jinhua
 4 states that "Dr. Dyer offers outright legal conclusions . . . without touching on the underlying legal
 5 factors or elements, thereby improperly substitute his own opinions for those of the jury." Jinhua Mot.
 6 At 5. That is incorrect. Dr. Dyer's opinion on the purported "ultimate issue" of trade secrecy is
 7 confined to a single paragraph among roughly seven pages addressing the definitional *elements* of "trade
 8 secret." Jinhua does not appear dispute that Dr. Dyer's opinion on the elements of the definition of
 9 "trade secret" are proper. "[A]n expert may provide facts and analysis which lead the jury toward [the]
 10 conclusion" that information is a trade secret. *See, e.g., Caudill Seed & Warehouse Co. v. Jarrow
 11 Formulas, Inc.*, No 3:13-cv-82, 2019 WL 1435934, at *3 (W.D. Ky. Mar. 29, 2019) (citing cases).

12 Jinhua's mischaracterization appears aimed at excluding more than just testimony on the
 13 purported ultimate issue of whether the Indicted Trade Secrets are "trade secrets" under the statute.
 14 Jinhua cites numerous instances of the word "trade secret" in Dr. Dyer's disclosure outside of the
 15 ultimate-issue section. Jinhua Mot. At 4-5. But those uses of the term "trade secret" are just a short-
 16 hand way to refer to the information the United States alleges is a trade secret and that Dr. Dyer believes
 17 is protectable as a trade secret (under the legal or colloquial definition). One of the instances of the term
 18 cited by Jinhua even explicitly states Dr. Dyer will testify information is a trade secret "or meets the
 19 elements of the definition of 'trade secret.'" *See id.* at 4 (quoting Dyer Disclosure at 6).

20 In light of the conflicting case law and the insignificance of having Dr. Dyer state the obvious
 21 after opining on most of the definitional elements of "trade secret," the United States will agree that
 22 experts (including Jinhua's) will not testify to whether information meets the legal definition of "trade
 23 secret" under 18 U.S.C. § 1839(3).

24 **II. "Misappropriation" of Trade Secrets is Not an Ultimate Issue**

25 Dr. Dyer's opinions will help the jury understand how Project M used the information
 26 defendants stole from Micron to develop a DRAM manufacturing process. Section III of Dr. Dyer's
 27 disclosure summarizes his findings on the extent of that use. Based on a thorough review of Micron

1 documents and countless Project-M documents, Dr. Dyer determined that Project M used an exact copy
 2 of a Micron 25 nanometer manufacturing process as the starting point for its own. Dr. Dyer analyzed
 3 the Project M process flow as it evolved over time to determine how it deviated from Micron's process
 4 and, in some instances, the source of process technology for those deviations.

5 Unlike a civil trade-secret case, such evidence of a defendant's use of a stolen trade secret—
 6 sometimes called “misappropriation”—is not an ultimate issue in this criminal case. The word
 7 “misappropriation” does not appear in either of the charged statutes. *See* 18 U.S.C. §§ 1831, 1832. The
 8 only substantive, non-conspiracy count against Jinhua (Count 7) charges a violation of 18 U.S.C.
 9 1831(a)(3). That section applies to one who “*receives, buys, or possesses* a trade secret, knowing the
 10 same to have been stolen or appropriated, obtained, or converted without authorization.” 18 U.S.C. §
 11 1831(a)(3) (emphasis added). The United States must also prove defendants acted or conspired with the
 12 intent to benefit a foreign government or instrumentality, 18 U.S.C. § 1831(a), and to injure Micron and
 13 benefit itself., 18 U.S.C. § 1832(a).

14 Dr. Dyer's opinions on defendants' extensive use, or “misappropriation,” of the stolen trade
 15 secrets is strong circumstantial evidence of the required intent. His opinions and their bases tend to
 16 prove, for example, that Project-M employees did not unwittingly possess the stolen Micron trade
 17 secrets. Nor did they possess the information merely as part of a technical library that would sit on the
 18 shelf for future pleasure reading or study. Instead, Dr. Dyer will show how Project-M engineers used
 19 Micron's stolen information—including the Indicted Trade Secrets—as the very basis upon which to
 20 develop DRAM from Project M. Project M employees, copied, misappropriated, used, referenced,
 21 altered, downloaded—or whatever other relevant verb one can call it—aspects of Micron's process
 22 technology both large and small: from the entire sequence of hundreds of manufacturing steps, to
 23 detailed recipe parameters for individual steps specified to decimal places. Dr. Dyer's opinions in that
 24 regard are not opinions on an ultimate issue. Instead, his opinions—and more importantly the bases for
 25 them—are overwhelming circumstantial evidence of defendants' intent and of the breadth of the Project
 26 M conspiracy to develop DRAM with stolen technology.

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Use of the term “misappropriation” at trial, therefore, is a non-issue. Unlike the term “trade secret,” “misappropriation” is not a loaded legal term in a criminal trade-secret case. The United States and its expert, therefore, should be free to use that term to express the nature of Dr. Dyer’s opinions. But the issue is not critical. Dr. Dyer will use colloquial terms like “copied,” “used,” “referenced,” “altered,” or “duplicated” to express his opinions about what Jinhua did with Micron’s trade secrets. Whether he can also use the term “misappropriated” is of little moment.

Similarly, the use of the word “stolen” in Dr. Dyer’s disclosure is shorthand for how the United States refers to the information it alleges the defendants stole from Micron. The United States does not intend to elicit testimony from Dr. Dyer that defendants stole Micron’s information.

CONCLUSION

The United States will stipulate that neither party’s expert witness should offer testimony on the issue whether information meets the relevant legal definition of “trade secret.” The Court should deny Jinhua’s motion to the extent it seeks to preclude Dr. Dyer from testifying about defendants’ use and copying of the Indicted Trade Secrets or using the term “misappropriation” in that context. The Court need not enter an Order precluding Dr. Dyer from testifying that Jinhua stole Micron’s trade secrets, because the United States did not notice such testimony and has no intention on eliciting such testimony from Dr. Dyer.

Dated: December 22, 2021

Respectfully Submitted,

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